**Team: Bear’s Den Burrito Bowl**

**Architecture Design:**

For designing the architecture of Builder’s Block we designed a Client Server Database architecture. We chose this because it is relatively simple, and gels well with Builder’s Block.

**Architecture Design Diagram**:



**Design Description:**

The architectural pattern consists of three components, the client, the server and the database.

The View for Builder’s Block handles the UI for the website. It is essentially the display of anything that the user sees. This is mainly handled by React. There is a small variety of different views that the user can see. The Generate Palettes view will display when the user selects Palettes from the main menu. Any interaction with the UI can trigger user events sending information to the controller to handle the inputs.

The controller handles the various events from the view. These events can be a simple button press to load a page, login or out of an account, or save a palette. When an input is detected, the controller then notifies the view of any changes if necessary and then notifies the model of any state changes.

The model for Builder’s Block handles the data from the app. Here the view can access any data for specific elements in the app to update the UI. Any state changes notified by the controller will be stored in Firebase and a notification of a change if necessary, can be sent out by the model to the view controller. This will allow for the view to be updated when a new item has been added or a new message has been sent out. This communication between the database and the view controller is imperative in updating information on the application.